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10/811,305	03/29/2004	Michael John Wray	200300134-2	8275

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EXAMINER

WANG, HARRIS C

ART UNIT	PAPER NUMBER
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2439

NOTIFICATION DATE	DELIVERY MODE
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01/16/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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DETAILED ACTION

Response to Arguments

Applicant's arguments filed 11/11/2008 have been fully considered but they are not persuasive.

Applicant first cites the claim limitation "the at least one security rule relating to the at least one second logically protected computing compartment is only arranged to be loaded onto said trusted computing platform if one or more services or processes associated therewith are enabled."

The Applicant then argues "In other words, claim 1 recites wherein security rules are only loaded onto said trusted computing platform if one or more services associated with the rules are enabled (pg. 2 of Remarks)."

The Examiner respectfully disagrees. The claim limitation requires "the at least one security rule relating to the...compartment is only arranged to be loaded onto said trusted computing platform if one or more services or processes associated are enabled."

In other words, the claim language never explicitly loads the rules. Instead the rules are ready to be loaded (i.e. "arranged to be loaded"). Any arguments deriving from loading rules into compartments are considered spurious.

Applicant argues that Griffin "appears to indicate that the security module is merely a monitoring program that checks for the presence of previously loaded

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rules...No mention is made of loading a rule based upon resources of a newly loaded compartment being enabled. (pg. 3 of Remarks).”

The Examiner respectfully disagrees. In the cited section Griffin teaches “access control checks are performed such as through the use of hooks to a dynamically loaded security module that consults a table of rules indicating which compartments are allowed access the resources of another compartment (Non-Final, pg. 4, Griffin Paragraph [0068]).” This explicitly teaches loading a rule based upon the resources of a compartment being enabled.

The remaining arguments derive from the ones above and are rejected for the same rationale.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Griffin.

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Regarding Claim 1, 12

Griffin (US 20020194496) teaches a system comprising a trusted computing platform including:

at least one first logically protected computing compartment associated with initialization of said system and

at least one second logically protected computing compartment, second logically protected computing compartment being associated with at least one service or process supported by said system, (*"Each resource of the computing platform which it is desired to protect is given a label indicating the compartment to which that resource belongs. Mandatory access controls are performed by the kernel of the host operating system to ensure that resources from one compartment cannot interfere with resources from another compartment."* Paragraph [0034])

wherein the system is arranged to load onto said trusted computing platform a predetermined security policy including at least one security rule for controlling the operation of each of said logically protected computing compartments ("The actions or privileges within a component are constrained, particularly to restrict the ability of a process to execute methods and operations which have effect outside the compartment" Paragraph [0031]) The Examiner interprets the at least one security rule as each of the methods of each compartments are restricted within itself.;

wherein the security rule relating to the at least one first logically protected computing compartment is arranged to be loaded onto said trusted computing platform when the system is initialized (*"the trusted device performs a secure boot process when the*

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computing platform is reset to ensure that the host operating system of the platform is running properly and in a secure manner" Paragraph [0025]) and

wherein the at least one security rule relating to the at least one second logically protected computing compartment is only arranged to be loaded onto said trusted computing platform if one or more services or processes associated therewith are enabled (*"access control checks are performed such as through the use of hooks to a dynamically loaded security module that consults a table of rules indicating which compartments are allowed access the resources of another compartment. In the absence of a rule explicitly allowing a cross compartment access to take place, an access attempt is denied by the kernel" Paragraph [0036])("Multiple applications can be run on the guest operating system, each within a separate compartment of the guest operating system. This embodiment enables each computing environment to be subdivided" Paragraph[0068])*

Regarding Claim 2,

Griffin teaches a system according to claim 1, wherein one or more common variable is defined for each compartment, wherein a relevant security rule is only arranged to be added if the variable associated with a particular compartment is enabled (*"Each resource of the computing platform which it is desired to protect is given a label indicating the compartment to which that resource belongs. Mandatory access controls are performed by the kernel of the host operating system to ensure that resources from one compartment cannot interfere with resources from another compartment. Access controls can follow relatively simple rules, such as requiring an exact match of the label" Paragraph [0034])*

Regarding Claim 10,

Griffin teaches a system according to claim 1, wherein the at least one compartment includes an operating system arranged to be controlled by the operating system kernel (*"the compartment is an operating system compartment controlled by a kernel of the host operating system" Paragraph [0032] of Griffin*)

Regarding Claim 11,

Griffin teaches the system according to claim 1, including means for determining when a service is starting, and on being enabled, for loading the compartment associated with that service and loading the security rules associated with that service (*"access control checks are performed such as through the use of hooks to a dynamically loaded security module that consults a table of rules indicating which compartments are allowed access the resources of another compartment. In the absence of a rule explicitly allowing a cross compartment access to take place, an access attempt is denied by the kernel" Paragraph [0036]*) The Examiner interprets an access attempt for the service as "a service starting."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffin in view of Wiseman.

Regarding Claim 3,

Griffin teaches the system according to claim 2. Griffin does not explicitly teach wherein at least one variable associated with a directory of plug-ins is arranged to be added wherein the system is arranged to determine, in response to a compartment being enabled, a status of said at least one variable and cause a relevant plug-in based upon a directory of plug-ins to run only if an associated variable is 'true'

Wiseman (20040003288) teaches at least one variable associated with plug-ins is arranged to be added wherein the system is arranged to determine in response to a compartment being enabled (*The Main Platform Initialization Code performs necessary functions to complete the initialization of the platform. Such functions may include initializing devices embedded within the platform, and locating and initializing optional plug-in or embedded adapters (having their own device initialization code). After this, the Main Platform Initialization Code locates the OS Loader and executes it. The OS Loader, in turn, loads the OS into memory and begins executing the OS. At this point, the platform is considered in the OS-present state and is fully under control of the loaded OS*)

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. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Griffin to accept plugins during initialization as taught by Wiseman.

The motivation is to extend the capabilities of the services.

Regarding claim 5,

Griffin and Wiseman teach a system according to claim 4, wherein the at least one compartment includes an operating system compartment arranged to be controlled by the operating system kernel (*"the compartment is an operating system compartment controlled by a kernel of the host operating system" Paragraph[0032] of Griffin*)

Regarding Claim 6,

Griffin and Wiseman teach a system according to claim 5, wherein the at least one compartment and network resources are arranged so communication between them is provided via relatively narrow kernel level controlled interfaces to a transport mechanism (*"Communication between compartments is provided using narrow kernel level controlled interfaces to a transport mechanism such as TCP/UDP" Paragraph[0036] of Griffin*)

Regarding Claim 7,

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Griffin and Wiseman teach a system according to claim 6, wherein said communication is governed by rules specified on a compartment by compartment basis (*"Access to these communication interfaces is governed by rules specified on a compartment by compartment basis" Paragraph [0036] of Griffin*)

Regarding Claims 8-9,

Griffin and Wiseman teach a system according to claim 7, including means for determining when a service is starting, and on being enabled, for loading the compartment associated with that service and loading the at least one security rule associated with that service (*"access control checks are performed such as through the use of hooks to a dynamically loaded security module that consults a table of rules indicating which compartments are allowed access the resources of another compartment. In the absence of a rule explicitly allowing a cross compartment access to take place, an access attempt is denied by the kernel" Paragraph [0036]) The Examiner interprets an access attempt for the service as "a service starting."*

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HARRIS C. WANG whose telephone number is (571)270-1462. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KAMBIZ ZAND can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harris C Wang/

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Examiner, Art Unit 2439

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2434